

REMARKS

By entry of this Amendment, claims 1-32 are pending in this application. Claims 1-13, and 19 are amended and claims 25- 32 are added without introduction of new matter. Support for the amended language of claims 1-13, and 19 is self-evident and evident from the discussion below. As will be apparent from the following arguments in support of patentability, the claims are not amended to overcome the prior art.

In the outstanding Office Action, claims 12-18 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite; claims 1-4, 6-8, and 10 stand rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,489,994 to Torok; claims 5 and 9 stand rejected under 35 U.S.C. 103(a) as unpatentable over Torok in view of U.S. Patent No. 6,529,239 to Dyck; and claims 12 and 19-24 stand rejected under 35 U.S.C. 103(a) as unpatentable over Torok in view of U.S. Pub. No. 2005/0030413 to Gough.¹

Regarding the rejection of claims 12-18 under 35 U.S.C. 112, second paragraph, independent claim 12 is amended to address the examiner's comments. More particularly, independent claim 12 is amended to recite that the method "determin[es] a light intensity threshold for saturation of said second pixels based on varying exposures corresponding to said varying aperture sizes; and determin[es] an integration time of said first pixels based on the determined light intensity." Non-limiting support for the amended language is provided by Applicant's disclosure at U.S. Pub. No. 2005/0052561, para. 21-22. As discussed therein, apertures 16, 18, 20, 22 of varying sizes are respectively placed over pixels 24, 26, 28, 30 within the non-active area 12 of the array 14. The varying aperture sizes permit different amounts of light to strike those pixels 24, 26, 28, 30. Consequently, depending upon which of those pixels

¹ The Office Action inadvertently rejects claim 11, and not claim 12, as unpatentable over Torok in view of Gough. It is clear that claim 12 was intended to be rejected.

become saturated 24, 26, 28, 30, a corresponding amount of light sufficient to saturate those pixels 24, 26, 28, 30 can be determined. In turn, that determination can be used to set an integration time for pixels within the active area 10 of the array 14. In view of the above, Applicant respectfully requests that this rejection be withdrawn.

Claims 1-4, 6-8, and 10 stand rejected under 35 U.S.C. 102(b) as anticipated by Torok. This rejection is respectfully traversed.

Claim 1 is directed to an imager apparatus including a pixel array having an active imaging area and a non-active area, the pixel array having a plurality of first pixels in the active area and a plurality of second pixels in the non-active area; and a mask having a plurality of apertures respectively located over and exposing said second pixels. Claims 2-4, 6-8, and 10 depend from claim 1.

The Office Action cites Torok's scanning process as defining sets of active and non-active pixels teaching the claimed first and second pixels of the claimed invention. Torok's scanning process is described with reference to Figures 3 and 4. As described, Torok's scanning process temporarily exposes pixels 1 under apertures 32, while pixels 2-4 are not unexposed. Thereafter, pixels 2 are exposed under apertures 32, while pixels 1, 3, 4 are not exposed. In this manner, each of the pixels 1-4 of the entire image pattern 46 is sequentially exposed in the order of pixels 1, 2, 3, then 4.

According to the Office Action, pixels 1 anticipate the claimed first pixels of the active area because those pixels 1 are "active" during their exposure; and, concurrently, the pixels 2-4 anticipate the claimed second pixels of the non-active area because those pixels 2-4 are "non-active" (during the exposure of pixels 1). Even assuming *arguendo* that the Office Action's temporal distinction between pixels 1 and pixels 2-4 is proper (i.e., the pixels are structurally identical; and the distinction is based solely on the

location of the scanning apertures 32 at a given moment), pixels 1 and pixels 2-4 still fail to teach the claimed feature of "a mask having a plurality of apertures located over and exposing said **second** pixels". More particularly, when the apertures 32 are exposing pixels 1 and not exposing pixels 2-4, the apertures 32 are not "located over and exposing" the pixels 2-4. Thus, the Office Action cannot assert the placement of apertures 32 (above pixels 1) as creating a distinction between pixels 1 and pixels 2-4 teaching the claimed "active" and "non-active" areas, and then remove that distinction by relying on a different placement of the apertures 32 (above pixels 2-4) as teaching the claimed apertures exposing the second pixels of the non-active area. Accordingly, Applicant respectfully requests that this rejection be withdrawn.

Claims 5 and 9 stand rejected under 35 U.S.C. 103(a) as unpatentable over Torok in view of Dyck. Claims 5 and 9 depend from claim 1. As Dyck does not cure the above-noted deficiencies of Torok (and is merely cited as teaching the metal mask and color filter of claims 5 and 9, respectively), Applicant respectfully requests that this rejection be withdrawn.

Claims 12 and 19-24 stand rejected under 35 U.S.C. 103(a) as unpatentable over Torok in view of U.S. Pub. No. 2005/0030413 to Gough. This rejection is respectfully traversed.

Though they are different in scope, each of amended independent claims 1, 12, and 19 recite first pixels in an active area; second pixels in a non-active area; and apertures over the second pixels. As noted above, even under the Office Action's temporal distinction between pixels 1 and pixels 2-4 of Torok, those pixels cannot teach the claimed apertures over the second pixels. Accordingly, Applicant respectfully requests that this rejection be withdrawn.

New dependent claims 25-32 are added by entry of this Amendment. Non-limiting support for dependent claims 25-27 is provided at least by U.S. Pub. No. 20050052561 at para. 7 and 18. Non-limiting support for dependent claims 28-30 is provided at least by U.S. Pub. No. 20050052561 at para. 21. As claims 25-30 depend from claims 1, 12, 19, those new claims distinguish over the cited references for at least the reasons stated above with respect to their base claims. Non-limiting support for independent claim 31 is provided by at least U.S. Pub. No. 20050052561 at para. 7, 21, and 22. Non-limiting support for dependent claim 32 is provided by at least para. 7 and 22. Claims 31 and 32 are believed to distinguish over the cited references.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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